

In the Claims:

Please cancel claims 28, 30, 31, 38, 40, 41, 42, 47, and 49, without prejudice, and amend claims 32, 35, 36, 43-46 and 48 as follows:

1-19. (Withdrawn)

20 - 21. (Previously Canceled)

22 - 26. (Withdrawn)

27. (Previously Added) A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5, the method comprising:

- a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
- b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.

28. (Canceled)

29. (Previously Added) A method for identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5, the method comprising:

- a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
- b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5.

30. (Canceled)

31. (Canceled)

32. (Currently Amended) The method of any one of claims ~~27-31~~ or 29, wherein binding of the test compound to the polypeptide is detected by the use of an assay for a hVR-2 activity.

33. **(Previously Added)** The method of claim 32, wherein said hVR-2 activity is modulation of membrane depolarization.

34. **(Previously Added)** The method of claim 32, wherein said hVR-2 activity is modulation of intracellular calcium levels.

35. **(Currently Amended)** The method of any one of claims 27-~~34~~or 29, wherein said cell expressing said polypeptide is a neuronal cell.

36. **(Currently Amended)** The method of any one of claims ~~27-34~~or 29, wherein said compound modulates the activity of said polypeptide.

37. **(Previously Added)** A method for identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5, the method comprising:

- a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and
- b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.

38. **(Canceled)**

39. **(Previously Added)** A method for identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5, the method comprising:

- a) contacting a sample comprising the polypeptide with a test compound under conditions suitable for binding; and
- b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:5.

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Currently Amended) The method of any one of claims ~~37-41~~, 39, 46 or 48, wherein binding of said test compound to said polypeptide is detected by the use of a direct binding assay.

44. (Currently Amended) The method of any one of claims ~~37-41~~, 39, 46 or 48, wherein binding of said test compound to said polypeptide is detected by the use of a competition binding assay.

45. (Currently Amended) The method of any one of claims ~~37-41~~, 39, 46 or 48, wherein said test compound modulates the activity of said polypeptide.

46. (Currently Amended) A method for identifying a compound which binds to a polypeptide that is at least 95% identical to the amino acid sequence of SEQ ID NO:5 and is capable of modulating membrane excitability in a cell, the method comprising:

- a) contacting a cell expressing the polypeptide with a test compound under conditions suitable for binding; and
- b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.

47. (Canceled)

48. (Currently Amended) A method for identifying a compound which binds to a polypeptide that is at least 95% identical to the amino acid sequence of SEQ ID NO:5 and is capable of modulating membrane excitability in a cell, the method comprising:

- a) contacting the polypeptide with a test compound under conditions suitable for binding; and

Practitioner's Docket No. MPI98-093P2RCP3DV1M (formerly MNI-062CP2DV1)

b) determining whether the test compound binds to the polypeptide, thereby identifying a compound which binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:5.

49. (Canceled)
